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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,340	08/31/2001	Agathagelos Kyrlidis	96072CIP2	1425
7590	12/29/2004		EXAMINER	
Martha Ann Finnegan, Esq. Cabot Corporation Billerica Technical Center 157 Concord Road Billerica, MA 01821-7001			PHASGE, ARUN S	
			ART UNIT	PAPER NUMBER
			1753	
DATE MAILED: 12/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/945,340	KYRLIDIS ET AL.	
	Examiner	Art Unit	
	Arun S. Phasge	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-79 is/are pending in the application.
  - 4a) Of the above claim(s) 11-15 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/19, 7/18, 12/7.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

**DETAILED ACTION**

***Double Patenting***

Claims 1-6, 8-10 of this application conflict with claims 1-6, 8-10 of Application No. 09/654,182. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 16-79 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 16-49 of copending Application No. 09/645,182. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application when read in light of the specification clearly encompass and render obvious the claims of the instant application.

The claims differ from the copending claims by the use of the

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 5-10, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,787,029 in view of Betz et al. (Betz), U.S. Patent 5,653,494. The patent claims the same carbon material having attached the same types of organic groups (see claims 1-20). The patent does not claim the chromatography separation as claimed, although separation is claimed (see claim 19).

The Betz patent is cited to show the use of carbon with organic groups used as chromatographic material (see abstract and claims 1-28). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the granulated carbon particles of the prior patent in a chromatography separation method and column as claimed in the present invention, because the Betz patent shows the use of carbon particles bonded with polymers are useful as chromatographic materials.

Claims 1-10, 16, 19, 22-26, 50-51, 56-62, 77, 79 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of U.S. Patent No. 6,740,151 in view of Betz applied

as above. The patented claims disclose the claimed carbon with attached organic group (see claims 1-26). The reference fails to disclose the use of the carbon particle in a chromatography column and method.

The Betz patent is cited as above to show the use of the carbon particles bonded with polymers are useful in chromatography. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the granulated carbon particles of the prior patent in a chromatography separation method and column as claimed in the present invention, because the Betz patent shows the use of carbon particles bonded with polymers are useful as chromatographic materials.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10, 16, 19, 22-26, 28-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boes et al. (Boes), U.S. Patent 5,807,494 in view of Betz applied as above.

The Boes patent discloses the carbon particle having attached organic groups, wherein the groups are substantially the same as claimed in the instant application (see abstract and col. 4, line 20 to col. 5, line 22). The generic group disclosed by the Boes patent would disclose the organic groups as claimed with enough specificity to one having ordinary skill in the art. The reference further discloses a mixture of organic groups, which would read on the second organic group attached on the carbon material (see abstract). The reference further discloses the use for the carbon material, including adsorbents and filters (see col. 2, lines 35-45).

The patent does not disclose the use of the material in a chromatography column and method as presently recited. The Betz patent is cited as above to show the use of the carbon particles bonded with polymers are useful in chromatography. Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the carbon particles having attached organic groups of the Boes patent in a chromatography separation method and column as claimed in the present invention, because the Betz patent shows the use of carbon particles bonded with polymers are useful as chromatographic materials.

*Allowable Subject Matter*

Claims 17, 18, 20, 21, 27, 78 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

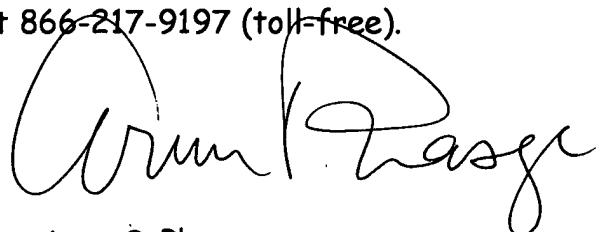
The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record fairly discloses or renders obvious the claimed method and apparatus comprising the use of carbon materials having attached the claimed organic materials, including the amino acids, protein, fluorinated compounds, glycols or a chiral ligand group.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A handwritten signature in black ink, appearing to read "Arun S. Phasge". The signature is fluid and cursive, with "Arun" on the left and "S. Phasge" on the right, connected by a flourish.

Arun S. Phasge

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Primary Examiner  
Art Unit 1753

Asp  
12/27/04